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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/777,807	02/12/2004	Dae-Gunn Jei	678-1315 (P11491)	5842
28249	7590	04/07/2006		EXAMINER
DILWORTH & BARRESE, LLP 333 EARLE OVINGTON BLVD. UNIONDALE, NY 11553			BROWN, VERNAL U	
			ART UNIT	PAPER NUMBER
			2612	

DATE MAILED: 04/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/777,807	JEI ET AL.	
Examiner	Art Unit		
Vernal U. Brown	2635		

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on 12 February 2004.

2a)  This action is **FINAL**.                            2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

4)  Claim(s) 1-19 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5)  Claim(s) \_\_\_\_\_ is/are allowed.

6)  Claim(s) 1-19 is/are rejected.

7)  Claim(s) \_\_\_\_\_ is/are objected to.

8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on \_\_\_\_\_ is/are: a)  accepted or b)  objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All    b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)  Notice of References Cited (PTO-892)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date .  
4)  Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_ .  
5)  Notice of Informal Patent Application (PTO-152)  
6)  Other: \_\_\_\_\_

## DETAILED ACTION

The application of Dae-Gunn Jei for Mobile Terminal Circuit including an RFID tag and Wireless Identification Method Using the Same filed 2/12/2004 has been examined. Claims 1-19 have been examined.

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 11-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Kuttruff et al.

US Patent Application Publication 20020080864.

Regarding claims 11-12, Kuttruff et al. teaches detecting, by a detector DE, an approach of a radio frequency identification (RFID) reader and informing a processor of the approach of the RFID reader by enabling the reception unit to transmit signal DS1 to the processor (paragraph 011); extracting, by the processor, RFID data from a memory portion of the processing unit VE and delivering the extracted RFID data to a codec (COD1, COD2), upon detecting the approach of the RFID reader; encoding, by the codec, the delivered RFID data into RFID codec data; and modulating, by a modulator (MOD1, MOD2), the RFID codec data into RFID modulation data, and transmitting the RFID modulation data to the RFID reader (paragraph 040).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2, 5, 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuttruff et al. US Patent 20020080864 in view of Ohkawa et al. US Patent 6972662.

Regarding claims 1 and 14-15, Kuttruff et al. teaches a mobile terminal circuit for transmitting radio frequency identification (RFID) data to an RFID reader, comprising: an antenna (inductor coil L, L2) for communicating with the RFID reader (paragraph 0031); a memory portion for storing the RFID data together with mobile terminal protocol data (paragraph 0056); a codec COD1 for encoding the RFID data into RFID codec data (paragraph 040); a modulator MOD1 connected to the codec, for modulating the RFID codec data into RFID modulation data (paragraph 040); a processor VE connected to the memory portion, for extracting RFID data stored in the memory portion and delivering the extracted RFID data to the codec (paragraph 0056); a detector DE connected to the antenna and the processor, for informing the processor of an approach of the RFID reader (paragraph 0048). Kuttruff et al. is silent on teaching a first clock generator connected to the processor and the memory portion, for providing operation timing to the processor and the memory portion; and a second clock generator connected to the first clock generator, the codec, and the modulator, for providing operation

timing to the codec and the modulator. Ohkawa et al. in an art related RFID device invention teaches a RFID device having a first clock generator (61) connected to the processor 8 and the memory of the processor and teaches a carrier signal generator (62) connected to the first clock generator and the modulator 64 (figure 2). The carrier signal is used as a clock signal (figure 3). Although the reference of Ohkawa et al. is silent on teaching the second clock is connected to the encoder, the reference teaches the use of a separate of a first and second clock for the receive and transmission part of the RFID device (figure 2) and one skilled in the art recognizes that the encoder and the modulator forms the transmission path in the RFID device as evidenced by Kuttruff et al. (figure 2).

It would have been obvious to one of ordinary skill in the art to have a first clock generator connected to the processor and the memory of the processor and a second clock generator connected to the first clock generator, the codec, and the modulator in Kuttruff et al. because this enables the RFID device to clock the receive and transmitting section of the RFID device separately for facilitating the different transmission and reception rates.

Regarding claim 2, Kuttruff et al. teaches the processor extracts the RFID data from the memory portion (paragraph 040) in response to information indicating the approach of the RFID reader, provided from the detector, and delivers the extracted RFID data to the codec (paragraph 0036).

Regarding claim 5, Kuttruff et al. teaches a rectifier for rectifying a voltage detected from a signal received via the antenna and delivering the rectified voltage to the processor (paragraph 0052).

Claims 3-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuttruff et al. US Patent 20020080864 in view of Ohkawa et al. US Patent 6972662 and further in view of Pratt et al. 20040198233.

Regarding claims 3-4, Kuttruff et al. teaches the detector generating a signal to the processor (paragraph 0039) but is silent on teaching the detector includes an interrupt port to the processor. Pratt et al. in an art related RFID device teaches the signal detected by a detector circuit connected to the interrupt port of the processor for enabling the processor to enter in an active mode (paragraph 0045). Pratt et al. also teaches a frequency detector for detecting the received frequency (paragraph 0048).

It would have been obvious to one of ordinary skill in the art for the detector to include an interrupt port to the processor in Kuttruff et al. because this enables the processor to be transformed into an active mode upon detecting a received signal from the interrogator.

Claims 6-7 and 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuttruff et al. US Patent 20020080864 in view of Ohkawa et al. US Patent 6972662 and further in view of Twitchell Jr. US Patent Application Publication 20050215280.

Regarding claims 6-7 and 16-19, Kuttruff et al. teaches a mobile terminal circuit for transmitting radio frequency identification (RFID) data to an RFID reader, comprising: an antenna (inductor coil L, L2) for communicating with the RFID reader (paragraph 0031); a memory portion for storing the RFID data together with mobile terminal protocol data (paragraph 0056); a codec COD1 for encoding the RFID data into RFID codec data (paragraph 040); a modulator MOD1 connected to the codec, for modulating the RFID codec data into RFID modulation data (paragraph 040); a processor VE connected to the memory portion, for

extracting RFID data stored in the memory portion and delivering the extracted RFID data to the codec (paragraph 0056); a detector DE connected to the antenna and the processor, for informing the processor of an approach of the RFID reader (paragraph 0048). Kuttruff et al. teaches a power block comprising rectifier and voltage regulator (figure 2). Kuttruff et al. is silent on teaching a first clock generator connected to the processor and the memory portion, for providing operation timing to the processor and the memory portion; and a second clock generator connected to the first clock generator, the codec, and the modulator, for providing operation timing to the codec and the modulator and is also silent on teaching the processor commands the power block to provide electric power to the RFID module. Ohkawa et al. in an art related RFID device invention teaches a RFID device having a first clock generator (61) connected to the processor 8 and the memory of the processor and teaches a carrier signal generator (62) connected to the first clock generator and the modulator 64 (figure 2). The carrier signal is used as a clock signal (figure 3). Although the reference of Ohkawa et al. is silent on teaching the second clock is connected to the encoder, the reference teaches the use of a separate of a first and second clock for the receive and transmission part of the RFID device (figure 2) and one skilled in the art recognizes that the encoder and the modulator forms the transmission path in the RFID device as evidenced by Kuttruff et al. (figure 2). Ohkawa et al. is also silent on teaching the processor commands the power block to provides electric power to the RFID module. Twitchell Jr. in an art related tag system invention teaches a processor commanding the power block to supply power to the RFID device (paragraph 0065) in order to conserve power when the device is not in use.

It would have been obvious to one of ordinary skill in the art to have a first clock generator connected to the processor and the memory of the processor and a second clock generator connected to the first clock generator, the codec, and the modulator and the processor commands the power block to provides electric power to the RFID module in Kuttruff et al. because this enables the RFID device to clock the receive and transmitting section of the RFID device separately for facilitating the different transmission and reception rates. The controlling of the power supply by the processor allows the conservation of the power supply.

Claims 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kuttruff et al. US Patent 20020080864 in view of Ohkawa et al. US Patent 6972662 in view of Twitchell Jr. US Patent Application Publication 20050215280 and further in view of Jenkins, IV. et al. US Patent 6172518.

Regarding claim 8, Kuttruff et al. in view of Ohkawa et al. in view of Twitchell Jr. teaches the use of a processor to control the input power to the RFID module (see response to claim 7) but is silent on teaching the processor commands the power block using an enable pin. Jenkins, IV. Et al. teaches the conventional practice of using a power enable pin on a module to control the supply of power to the module (col. 2 lines 37-50) in order to conserve on the power supply.

It would have been obvious to one of ordinary skill in the art to command the power block using an enable pin because this provides an effective means of controlling the power supply base on external condition to the module in order to conserve on the power consumption.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kuttruff et al. US Patent 20020080864 in view of Ohkawa et al. US Patent 6972662 in view of Twitchell Jr. US

Patent Application Publication 20050215280 and further in view of Applicant's Admitted prior art.

Regarding claim 9, Kuttruff et al. teaches a detector DE attach to the processor for detecting the received signal (paragraph 011) but is silent on teaching the detector is included in the processor. The applicant admitted prior art (figure 3) teaches a detector 307 integrated in a processor 100.

It would have been obvious to one of ordinary skill in the art to include the detector into the processor because this represents a cost saving by having fewer parts on the circuit board.

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kuttruff et al. US Patent 20020080864 in view of Ohkawa et al. US Patent 6972662 in view of Twitchell Jr. US Patent Application Publication 20050215280 and further in view of Pratt et al. 20040198233.

Regarding claim 10, Kuttruff et al. teaches the detector generating a signal to the processor (paragraph 0039) but is silent on teaching the detector includes a frequency detector for detecting a variation in frequency interrupt port to the processor. Pratt et al. in an art related RFID device teaches a frequency detector for detecting the received frequency (paragraph 0048).

It would have been obvious to one of ordinary skill in the art for the detector to include a frequency detector for detecting a variation in frequency this allows the proper demodulating and decoding scheme to be used to capture the received data.

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kuttruff et al. US

Patent 20020080864 in view of Twitchell Jr. US Patent Application Publication 20050215280.

Regarding claim 13, Kuttruff et al. teaches a processor for controlling the receipt and transmission of data (paragraph 0031) but is silent on teaching the processor commands a power block to provide electric power to the RFID module upon detecting the approach of the RFID reader. Twitchell Jr. in an art related tag system invention teaches a processor commanding the power block to supply power to the RFID device (paragraph 0065) in order to conserve power when the device is not in use.

It would have been obvious to one of ordinary skill in the art for the processor to command the power block to provide electric power to the RFID module upon detecting the approach of the RFID reader because this allows the conservation of power.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vernal U. Brown whose telephone number is 571-272-3060. The examiner can normally be reached on 8:30-7:00 Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy Garber can be reached on 571-272-3998. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Vernal Brown  
March 28, 2006



WENDY R. GARBER  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600